ATTACHMENT 1

Trinity River Restoration Program

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NC-150

MEMORANDUM

TO: TMC and TAMWG

FROM: Caryn Huntt DeCarlo, Executive Director
Trinity River Restoration Program

SUBJECT: Director's Report

DATE: March 21, 2017

Major TRRP activities between January and March 21, 2017 focused on Program efforts to further permitting and environmental compliance actions for Deep Gulch/Sheridan Creek channel rehabilitation project, development of the 2017 spring flow hydrographs and gravel augmentation plan, and implementing the FY18 Science Work Plan process. Details on some of these activities follow.

Organizational Updates

Executive Director: Caryn Huntt DeCarlo began this position with TRRP on January 8, 2017.

Grants and Agreements Specialist: Deanna Jackson, a long-time employee of the TRRP, began her new position on February 5th, 2017. Her experience working with the Trinity River Program since 1989 makes her an excellent choice for the position. Deanna's proven customer service skills, experience with Reclamation fiscal and reporting processes, as well as established relationships with Reclamation Area Office and Regional Office staff represent an effective attribute for the position. Due to her long tenure in the Program, Deanna has an extensive understanding of the TRRP goals, activities, and challenges. Her positive relationships with all of the TRRP staff, Partners, and stakeholders are a tremendous asset for the work of the Grants and Agreements position.

Project Coordination Specialist, Realty and Compliance Outreach: Kevin Held started with TRRP on January 23rd, 2017. Kevin has a master's degree in public administration with a concentration in environmental management, policy and law from the University of Colorado Denver. For his final capstone project Kevin evaluated community engagement efforts for one of the country's largest county open space programs while working with the agency to improve community involvement. Kevin is a returned U.S. Peace Corps Volunteer who served in the Philippines to promote environmental education and community development. Kevin has worked five seasons with the U.S. Forest Service in Colorado and Alaska and completed a Student Conservation Association internship at Rocky Mountain National Park. He has B.S. in Journalism from the University of Colorado Boulder and loves to play outside as much as possible and explore new areas.

Civil Engineer: The staff civil engineer vacancy was advertised as a GS-12 in June but failed to produce a viable certificate of qualified applicants. It was re-advertised in the fall as a GS 9/11/12 to U.S. Citizens to increase applicant pool. In-person interviews were conducted in December, a selection was made, but rejected by the Reclamation Regional office due to an HR error in the cert. An additional candidate was interviewed and a selection was submitted, but the candidate declined the offer. The position cannot be flown again due to the current federal government hiring freeze.

TRRP Secretary: Due to the current federal government hiring freeze, TRRP is unable to fill the Secretary position.

Science Updates

Fiscal Year (FY) 2018 Science Work Plan process: The focus has been on furthering the Adaptive Management program through reporting, providing transparency, and integrating management actions and science. The FY2018 Solicitation Package was built from the TRRP technical work groups (WG) and the Interdisciplinary Team (IDT) input. Based on current programmatic information needs, the WGs developed discipline-specific prioritized project lists and identified project objectives. The IDT reviewed the WGs' lists, refined the objectives, and prioritized the overall list of projects. This input from WGs and the IDT was used to identify projects that were prioritized as having a greater immediate need for the upcoming fiscal year within TRRP and be included in this Solicitation Package. Projects have not yet been ranked, but rather separated by monitoring and assessment type. Proposed Investigation Plans (IPs) were submitted on March 5th, and now are being reviewed internally and externally. Thirty-four proposed IPs were submitted to include 13 longer-term status and trend, 5 effectiveness, 3 model/research/validation, and 13 reporting (e.g., synthesis, compilation). No proposed IPs were submitted for compliance needs as suggested in the Solicitation Package. Not all projects included in the Solicitation Package, will be awarded funding. The review process will help inform recommendations for project funding.

2017 flow scheduling process: The process has been adapted this year. In planning for water year 2017, the Flow WG members developed a several hydrographs for two likely water year types (wet and extremely wet). Proposed hydrographs were developed with specific predicted responses for each hydrograph, which were described and discussed at a combined IDT and Flow WG meeting on February 23rd. Two alternatives for each water year were determined to potentially meet wet year objectives (to include geomorphic and riparian establishment), therefore in addition to the 2 ROD hydrographs 4 alternative hydrographs were evaluated through the draft Flow DSS process. On March 15th the Flow WG and IDT met again to discuss the draft Flow DSS results, as well as the caveats and assumptions with each of the model results. It was determined that the draft Flow DSS (and the model details within) will need further development. However, it should be noted that undertaking the process of the draft Flow DSS for WY17 was useful to highlight amendments and improvements moving forward. Both IDT and the Flow WG concur with the recommended hydrographs for WY17, as well as the justification for the hydrographs presented in today's meeting.

Technical Work Groups (WG): Briefings are included in Appendix I.

Implementation Update

Project design/construction

USFWS and NMFS Biological Assessments

For some time, the program has intended to reinitiate ESA Section 7 consultation to ensure that a biological opinion accurately captures the geographic and on-the-ground scope of non-flow TRRP restoration activities. There is no progress to report since the last quarterly update. The program's environmental support services contract is still undergoing review following justification by program staff that the ESA task support is within scope of the contract.

Bucktail Channel Rehabilitation Site

Revegetation is about 70% complete and ongoing at the site of the 2016 Bucktail project site. In addition to willow and cottonwood poles planted during and post construction, some ~~6,447~~ 5,809 container plants of 31 species have been planted to date in 5.5 acres of riparian and upland areas since February. Remaining planting of the large central hill and areas likely to have sediment redistributed during high flows will take place next fall. Irrigation will commence within a few weeks of the end of the rainy season for the next 3 years and will consist of overhead sprinklers and/or hand-lines supplied from river pumps, similar to what was done at the recent Hocker Flat re-revegetation.

Deep Gulch/Sheridan Creek Channel Rehabilitation Site

Construction of the combined Deep Gulch/Sheridan Creek project is planned for summer of 2017. Following guidance from Reclamation's Northern California Area Office area manager, the ED requested through FWS that an independent engineer with river restoration design experience (Dr. Conor Shea) conduct a review of the design to determine whether there were any non-essential components of the design that could be dropped to reduce costs. None were identified by the review. The intent is to mobilize equipment in early July and complete all river left and in-channel construction in the 15 July- 15 September construction window. Further construction on river right and regrading and revegetation activities will likely extend into the fall. In the event that construction costs exceed funds available in FY17, some river ~~left~~ right activities may need to be completed later in FY18.

Dutch Creek Channel Rehabilitation Site

DWR continues to work with the Design Team on development of a design for Dutch Creek, emphasizing the middle (aka runway) section of the ESL. The project may or may not include components the design for Lower Dutch Creek, features of which had run in to major FEMA compliance issues and has been tabled for now. It is hoped that an implementable design will be available for construction as soon as summer of 2018.

Future designs

Following a 24 February design team meeting, ESLs were assigned to each design group for development of current conditions analyses for the next round of designs. Geographic emphasis was based upon the 2014 logic model, the pilot river corridor strategy, and the consensus of the Design Team, and includes Evans Bar, Oregon Gulch, Sky Ranch, and Upper Conner Creek. The current conditions analyses will be presented at a future joint

Design Team/IDT meeting to facilitate an interdisciplinary discussion of limiting factors and design objectives for those areas.

Compliance

FEMA compliance

A conditional letter of map revision (CLOMR) for the Deep Gulch/Sheridan Creek project was submitted in late December by Trinity County. FEMA responded on 27 February with a letter asking for further information and explanations of data; it is expected that involved parties (DWR, Reclamation, Trinity County) will have responded to their inquiry by the week of 13 March. DWR will have completed the LOMR analyses for Lower Junction City, Upper Douglas City, and Limekiln by March 20; these results will be reviewed by Reclamation's Technical Service Center and LOMRs will be submitted later this spring. The LOMR analysis for Bucktail will be completed following the return of as-built data from the contractor later this spring.

Deep Gulch/Sheridan Creek NEPA/CEQA

The draft EA/IS was submitted to the state clearinghouse, opening the 30 day public comment period on 08 March.

Deep Gulch/Sheridan Creek EA/IS Public Meeting

TRRP Weaverville, Yurok Tribe, and Hoopa Valley Tribe staff held a public meeting on March 15th, 2017 at the Junction City Grange on the EA/IS planned summer 2017 rehabilitation construction project. It was the largest attendance in memory for a TRRP meeting. The participants were mostly locals who live in the vicinity of the project. Dialogue by the public with staff in the Open House format was extensive and overall, was relatively positive related to the proposed project.

Concerns were expressed with differing views by different participants. Concerns included: uncertainty and worry related to construction noise and the equipment/truck traffic impacts on roads in the residential area; potential impacts to private wells; displacement of wildlife; and preference for a currently rough access road to be returned to rough condition so future public use won't increase. These impacts will be mitigated to the extent possible in project design.

A more Program-wide concern expressed by one participant was the tremendous amount of TRRP-related revegetation trash along many miles of the river from the plastic protectors used on plants in the revegetation work that is often spread downstream in annual high flow releases. TRRP Executive Director is working to identify potential ways to address this issue. Suggestions by TRRP Hoopa Valley Tribe Riparian Ecologist James Lee are to consider stopping using the previously required tree protectors and work to clean up sites where they have been used. Further ideas and coordination will be vetted by the Program with CDFW and others for ways to protect vegetation during revegetation efforts.

Public Outreach Update

Education Events

On January 27, 2017 Riparian Ecologist James Lee partnered with the U.S. Forest Service and the Trinity County Resource Conservation District to present two free public showings and discussions of the film project "One Stick at a Time." The film and the following discussion focused on using beavers in watersheds to build climate change resiliency.

On March 18, 2017 TRRP Data Steward, Eric Peterson, led a Public Nature Hike through the 2016 Bucktail channel rehabilitation site to discuss the Program's river restoration efforts. These Nature Hikes, intended to highlight TRRP's role on the river, are scheduled on a monthly basis and are free education opportunities open to the public.

Students in the Environmental Resources program from Humboldt State University will join TRRP Hydraulic Engineer Robert Stewart for a tour of the 2016 Bucktail channel rehabilitation site and an overview of TRRP's latest restoration activities on April 6, 2017.

Announcements and Informational Meetings

A public meeting was held on March 15, 2017 in Junction City, CA to discuss the proposed 2017 channel rehabilitation project at Sheridan Creek and Deep Gulch.

In their quarterly *Conservation Almanac* the Trinity County Resource Conservation District published an article describing how TRRP uses restoration flow releases based on the water year type determination.

A Program overview will be printed in the annual Fishing the California Alps 2017.

An informational letter on 2017 restoration flow releases and gravel augmentation plan will be mailed to 511 addresses of people living along the Trinity River. A News Release will also be prepared and provided to various area newspapers.

The following informational meetings are scheduled:

- **11 April 2017** – 2017 Flow Release Schedule and Gravel Augmentation Plan Informational Meeting
- **TRRP Open House** – Planned for June 2017.
- **Public Float** – Planned for summer 2017

Publications and Reports:

- CDFW (California Department of Fish and Wildlife). 2017. Klamath River basin fall chinook salmon spawner escapement, in-river harvest and run-size estimates, 1978-2016. CDFW, Arcata, California.
- North Coast Regional Water Quality Control Board, U.S. Bureau of Reclamation and U.S. Bureau of Land Management. 2017. Trinity River channel rehabilitation site: Deep Gulch (river mile 82.4-82.9) and Sheridan Creek (river mile 81.6-82.4) environmental assessment/initial study. DOI-BLM-CA-N060-2017-014-EA and TR-EA0117. Trinity River Restoration Program, Weaverville, California.
- North Coast Regional Water Quality Control Board, U.S. Bureau of Reclamation and U.S. Bureau of Land Management. 2017. Excerpted map (Figure 2-2) from Trinity River channel rehabilitation site: Deep Gulch (river mile 82.4-82.9) and Sheridan Creek (river mile 81.6-82.4) environmental assessment/initial study. DOI-BLM-CA-N060-2017-014-EA and TR-EA0117. Trinity River Restoration Program, Weaverville, California.

- Pittman, S. 2017. 2016 Trinity River sediment transport monitoring final report. Report to the Trinity River Restoration Program (TRRP) and the U.S. Bureau of Reclamation under contract R14C00122. GMA Hydrology, Inc., Placerville, California.

Data Packages:

- GMA Hydrology. 2016. Terrain Surface Data Package [As-Built for Limekiln Gulch]. Data Package for the Trinity River Restoration Program (TRRP) under US Bureau of Reclamation contract R14PC00122. GMA Hydrology, Inc. Arcata, California.
- Pittman, S. 2017. 2016 Trinity River sediment transport monitoring final report [with tabular data]. Data Package to the Trinity River Restoration Program (TRRP) and the U.S. Bureau of Reclamation under contract R14C00122. GMA Hydrology, Inc., Placerville, California.
- USFWS (U.S. Fish and Wildlife Service), CDFW (California Department of Fish and Wildlife), Yurok Tribal Fisheries, Hoopa Valley Tribe Fisheries, and USFS (U.S. Forest Service). 2017. Mainstem Trinity River salmon carcass locations in 2016. Data Package for the Trinity River Restoration Program produced by USFWS, Weaverville, California.
- USFWS (U.S. Fish and Wildlife Service), CDFW (California Department of Fish and Wildlife), Yurok Tribal Fisheries, Hoopa Valley Tribe Fisheries, and USFS (U.S. Forest Service). 2017. Mainstem Trinity River salmon redd locations in 2016. Data Package for the Trinity River Restoration Program produced by USFWS, Weaverville, California.
- USGS. 2017. Foothill Yellow-Legged Frog Database: Trinity2013-1016_RABO.
- USGS. 2017. Western Pond Turtle Database: Trinity2013-1016_ACMA.

TRRP Budget

The Executive Director is working with NCAO Budget Analyst Linsey Walker on development of the FY18 TRRP proposed budget for presentation to TAMWG and TMC. The total estimated amount of FY18 funding is currently $280,114 less than 2017 total, with potential additional reductions once federal budgets are finalized.

Funding Sources:	2016	2017	2018
USBR Water & Related (A30)	$ 11,911,000	$ 12,030,000	$ 11,911,000
USBR CVPIA (H37)	$ 1,500,000	$ 1,500,000	$ 1,500,000
USFWS	$ 1,734,780	$ 1,729,576	$ 1,568,462
TOTAL	**$ 15,145,780**	**$ 15,259,576**	**$ 14,979,462**

The Proposal to Address Refinements for the TRRP, discussed in the next section, has $40,000 approved in the FY17 TRRP budget with the remaining funding planned from funds outside of the TRRP.

Proposal to Address Refinements for the Trinity River Restoration Program (TRRP)

The Trinity River Flow Evaluation study (TRFE) and Record of Decision (ROD) are intended to restore and maintain fish and wildlife resources, while still allowing the other Trinity River Division purposes (diversions, power generation) to continue in a balanced approach. Implementation of the ROD is assigned to the TRRP.

The TRRP has had several reviews over the past 12 years which have identified successes, but also shortcomings such as a clear adaptive management framework. In response, the Trinity Management Council (TMC) implemented an organizational and functional refinement in 2009 developed by DOI.

The Hoopa Valley and Yurok Tribes believe many of the core issues remain from the 2009 TMC/DOI refinement. The Tribes, through the Regional Directors of the Bureau of Reclamation and U.S. Fish and Wildlife Service, requested that a Senior Scientist/Manager be hired to review the goals and mandates of the TRFE and ROD, identify refinements to the TRRP's management and functions that could better serve these goals, and mandates, and assist the DOI in implementing refinements.

The Regional Directors acknowledged the Tribes' request and agreed to the review. Area Manager Don Bader, working with Acting Executive Director Caryn Huntt DeCarlo, conducted initial market research to assess the appropriate type of contractual solicitation. The solicitation for the TRRP Refinements Proposal for an Adaptive Management Service Contractor was posted by Reclamation on Federal Business Opportunities March 14, 2017; proposal responses are due April 3, 2017.

The proposal packages will be prepared for Technical Evaluation Board (TEB) review by mid-April. TEB members will include both governmental and tribal officials, and a selection and award is expected by June 2017. A Coordination Team of TRRP Partners (Federal, State, County, and Tribal) will assist in facilitating the efforts of the review which is expected to take two years to complete, including assisting DOI in implementing refinements.

Appendix I: Technical Workgroup Briefings
March 2017

Updates have been prepared by the Trinity River Restoration Program (TRRP) technical workgroup (WG) coordinators for the Trinity Management Council and the Trinity Adaptive Management Working Group.

Workgroup: Design **Coordinator:** Mike Dixon

On 23 Jan 2017, the team discussed a variety of new and old business.

- A briefing on the status of compliance for the proposed Deep Gulch/Sheridan Creek channel rehabilitation project was provided by Brandt Gutermuth.
- Trevor Morgan from DWR presented an update on the evolving conceptual design for Dutch Creek. Feedback was received on things like floodplain lowering objectives, which will be incorporated into the design going forward.
- Nick Som facilitated a discussion on how the S^3 Model input metric of "capacity" could be used as a response variable in design alternative analysis. It was acknowledged that the current 40 mile mesh size was too large, but a new mesh could be created. It was suggested that Nick could write an R code to calculate new mesh for our use in comparing design alternatives. Damon Goodman led a discussion on syncing the approach to pre and post construction habitat monitoring.
- Reclamation leadership requested a review of the Deep Gulch/ Sheridan Creek design project, because the potential that costs could exceed current construction funding. It was proposed that Conor Shea would carry out the review the design and provide feedback to the Design WG and Reclamation.

On 27 Feb 2017, the team met again.

- Staff members of FWS, the Hoopa Valley Tribe, and the Yurok Tribe provided a summary of 2016 channel rehabilitation site habitat assessment results, and followed with an overview of a draft report summarizing trends in juvenile rearing habitat from 2005-2015 within the restoration reach. The draft results indicated some reduction in habitat in the years post-construction, however the results also suggested an increase in available overall and optimal habitat. Discussion occurred on the analyses which were restricted to a constant flow level (450 cfs), and therefore it was suggested that the results may not capture design elements that were developed particularly for higher flows. Furthermore, it was acknowledged that portions of rehabilitation sites were not accounted for because of potentially minimal overlapping of design sites and GRTS sampling. The draft report has not yet gone through internal and external review, and therefore further refinement of how the results are presented may occur.
- A subgroup reported out on their first-pass analysis to identify areas with substantial overburden of mining sediment that would be suitable for mass-grading to reduce the subsequent costs of channel rehabilitation sites in those areas.
- A subgroup reported out on their first-pass analysis of potential rehab site revisit locations where significant habitat gains could be achieved with relatively little cost or regulatory burden. While nearly the entire design team supports the general approach of revisiting areas to apply what we have learned since they were constructed, there was a spectrum of opinion on the propriety of doing corrective revisits where features (e.g., side channels) have ceased to function as designed.
- Trevor Morgan provided a brief update on the conceptual design for the middle section of Dutch Creek. There has been relatively little progress because staff time from the state's engineers had been devoted to the incident at Oroville Dam.
- The Yurok and Federal design groups provided a detailed refresher walk-through on the plan for Deep Gulch/Sheridan Creek which is proposed for construction year 2017 construction.

- Fred Meyer from the HVT design group provided a refresher update on the near-complete design for Chapman Ranch. There was some discussion about the persistence of side channels prompted by the size of the side channel in this design. It was reiterated that the design has been through two rounds of VE studies and was specifically designed to dovetail into Deep Gulch/Sheridan Creek. There was a proposal that as a program, we should potentially leverage outside funds as well, in light of increased costs associated with massive excavation required to reconnect floodplains in the Junction City valley reach.
- There was some discussion of which ESLs would be next in queue, and who would be tapped to carry out the current conditions analysis. Assignment of design groups to ESLs is ongoing, but it was articulated that presentations of current conditions would be made at a joint Design WG/ IDT meeting to facilitate a broader discussion of limiting factors and objectives that should be incorporated into subsequent conceptual designs.

Workgroup: Fish **Coordinator:** Todd Buxton

The Fish WG met on January 19 and February 16.

During the January 19th meeting:

- Assessed and provided recommendation to the Flow WG that no special considerations should be made regarding the low adult fish returns the past two years when designing hydrographs for the WY17 spring hydrograph.
- Reviewed and discussed a recommendation to allow flows released from Lewiston Dam to ramp down at night during the time period of November 1st to April 15th. Provided a memo to the Flow WG for further discussion.
- Discussed potential efficiencies in the scale sampling project to age Chinook salmon and the juvenile outmigrant trapping projects at Pear Tree and Willow Creek. Additional analyses on the former will be presented in the group's April 4 meeting, and analysis to address the latter may be included in a draft synthesis report on the juvenile outmigrant program that is expected June 2017.

During the February 16 meeting:

- Identified topics yet to be addressed in order for cohort analyses for fall Chinook to proceed, and it was agreed that a subgroup should meet to resolve these issues.
- Reviewed draft analysis on the difference in fall Chinook age composition based on random scale sampling and code-wire tagging at Trinity River Hatchery.
- Discussed details of implementation of video technology to make annual census counts of fall Chinook at the Willow Creek weir (WCW), which was prioritized for FY18 science work plan process in its November 30th meeting.

Workgroup: Flow **Coordinator:** Andreas Krause

- Developed technical recommendations for WY17 flow releases (in conjunction with the IDT).
- Initiated a stream gage network review.
- Provided support to Reclamation for development of Environmental Assessment (EA) regarding winter/spring variable flow releases in WY18.

Workgroup: Physical **Coordinator:** Wes Smith

During a March 1, 2017:

- Dave Gaeuman presented potential gravel augmentation scenarios for the Diversion Pool and 2 sites at Lowden Ranch for the WG to discuss. Dave developed specific volume estimates and details on locations to present to IDT for recommendations for today's meeting.
- The WG discussed for information sharing the physical monitoring that will occur in WY2017 includes sediment transport, gravel augmentation, and delta changes. It was suggested that there should be less sediment transport monitoring at Lewiston and rely more on the hydro-acoustics being implemented during 2017, additionally it was suggested that there would be value in extending the delta survey areas.

Workgroup: Watershed **Coordinator:** Nick Davids

- Provided a draft list of prioritized watershed restoration actions to incorporate into a potential Trinity River-wise programmatic permit.
- Updated the Funding Opportunity Announcement (FOA) which will close March 24, 2017.
- On March 2, an ad-hoc sub-group of the Watershed WG met with the new TRRP management team to provide history and discuss future direction of the Watershed WG.
- Organizing a meeting in late March or early April to review FY2015 funded recipients' reports and develop a list of priorities to aid the WG in future ranking process.

Workgroup: Wildlife/Riparian **Coordinator:** James Lee

- The wildlife/riparian workgroup has not met during this quarter, however several proposals were developed for the FY18 science work plan.

Workgroup: Interdisciplinary Team (IDT) **Coordinator:** Mike Dixon/Jennifer Norris

- IDT met monthly during the last quarter. The focus has been on the FY2018 Science Work Plan and in recent months the proposed flow hydrographs for water year 2017 (see ED report).
- Discussions have occurred on the roles and responsibilities to include WG coordinators, as well as with the Executive Director, Science Coordinator (SC), and Implementation Branch Chief (IBC) leading the program in a coordinated manner.
- Reiteration on WG processes to include WG coordinators providing meeting agendas for SC or IBC review and approvals to ensure direction is on task and annual WG work plans or priorities need to be provided to maintain program on task. It was identified that a strategic vision/plan would be beneficial in focusing WG efforts, as well as providing direction for the program.
- Comments and edits have been gathered on TRRP Work Group Manual (version July 2013) for potential future amendments and discussions.